version: Tampa-081602

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Introduction

Congratulations on your purchase of the TAMPA, designed and manufactured by M-Audio. TAMPA is a professional, single channel microphone/instrument preamp unlike any other. That's because our design team set out to discover just why expensive tube technology sounds so good, and devise a way to land that sound at affordable solid state prices. The result is far beyond tube modeling. It's a whole new technology called *Temporal Harmonic Alignment*[™].

Temporal Harmonic Alignment

—the Secret Behind the Sound: In natural sound sources such as strings, drum heads and vocal chords, harmonics share a characteristic temporal (phase) relationship to the fundamental. Our ears exhibit the same qualities. Solid state electronics induce distortion in the form of additional harmonics that are out of phase with the original source. Tube-based devices strike the ear as having such a "warm" sound because the added harmonics have the same temporal relationship as natural mechanisms (although predominantly in the midrange). This results in a sweet spot that makes vocals, guitars and other midrange-rich content sound especially pleasing. TAMPA's revolutionary new Temporal Harmonic Alignment technology produces that same phase relationship found in both tubes and nature. And unlike tubes, TAMPA's sweet spot spans the full spectrum of your sound—from bass to cymbals.

Dual Optical Servo Compressor

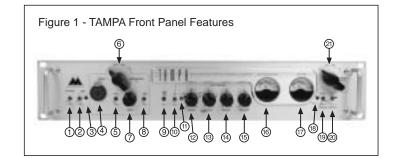
TAMPA also includes a dual optical servo compressor that is worth the price alone. Three fundamental problems plague engineers in designing compressors—distortion, noise and accuracy. The VCA technology used in inexpensive compressors exhibits less than professional specs on all three counts. Simple optical servo technology is much more quiet and accurate, yet has its own issues with distortion. The dual optical servo technology we use in TAMPA yields low noise, consistent accuracy, low distortion and exceptional transparency—and it comes built-in to a great mic preamp.

Your TAMPA's Features

- Professional mic/instrument preamp with Temporal Harmonic Alignment
- · Built-in dual optical servo compressor
- Balanced phantom-powered XLR mic input with variable impedance for optimized performance with vintage mics

- Balanced/unbalanced TRS instrument input
- 24-bit digital S/PDIF and AES/EBU output for direct connection to your digital recording gear
- · 20dB gain switch for an amazing maximum system gain of 66dB
- 20dB passive output pad switch
- Low-cut switch to eliminate rumble
- Discrete, class A circuitry throughout
- · VU-style meters for output level and compression gain reduction
- Clip indicator

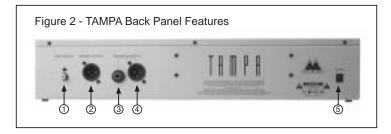
Front and Rear Panel Descriptions



Front Panel Features

- 1. POWER: Turns master power on/off for the unit.
- 2. +48V: Provides 48-volt phantom power to the XLR microphone input when engaged. Switch to the ON position when using a microphone requiring phantom power.
- 3. +48V INDICATOR: Lights when +48V switch is engaged to indicate that phantom power is on.
- 4. MICROPHONE/INSTRUMENT: Neutrix connector accepts both an XLR microphone input and a 1/4" TRS balanced or TS unbalanced instrument input.
- 5. INST/MIC: Switches between instrument and microphone inputs. Set to "INST" when using the 1/4" input jack, and set to "MIC" when using the XLR input jack. When INST is selected, the XLR input is disabled, and when MIC is selected, the 1/4" input is disabled.
- 6. INPUT IMPEDANCE: Allows user to select input impedances of 2400 ohms, 1200 ohms, 600 ohms or 300 ohms. This is particularly useful in conjunction with vintage mics requiring one of these impedances. For many modern mics, the recommended setting is 2400 ohms, though the load impedance setting is much more critical for vintage mics.
- 7. GAIN: Master preamp gain where fully counterclockwise yields minimum gain (0db) and fully clockwise delivers maximum gain (34dB).
- 8. +20dB: Provides an additional 20dB of preamp gain when engaged.

- 9. LOW CUT: Rolls off 12dB per octave at 80Hz and below when engaged. Use this to avoid rumble from passing traffic, footsteps and so forth.
- COMPRESSOR IN/OUT: Engages/disengages the TAMPA's entire compressor stage. When disengaged, TAMPA's compressor circuitry is removed from the signal path.
- 11. COMPRESSOR IN/OUT INDICATOR: Lights when the COMPRESSOR IN/OUT switch is set to the "IN" position to indicate that the compressor is on and is part of the signal path.
- 12. THRESHOLD: Threshold level at which the compressor engages. Range is from –20dB to +20dB.
- 13. RATIO: Ratio of the input dynamic above the compression threshold to the output dynamic above the compression threshold. Range is from 1.1:1 to 10:1.
- 14. ATTACK: Controls the amount of time required for the compressor to reduce the gain once the threshold level is reached. Range is 1 millisecond to 11 milliseconds.
- 15. RELEASE: Controls the amount of time it takes the compressor to return to normal or zero gain reduction. Range is from 250 milliseconds to 5 seconds.
- 16. GAIN REDUCTION METER: Provides metering (in decibels) of the gain reduction resulting from compression, where 0 VU represents zero gain reduction.
- 17. OUTPUT METER: Provides metering (in decibels) of TAMPA's overall output level (prior to the 20dB PAD), where 0VU represents +26dBu. This meter is unaffected by the 20dB PAD switch. Note that this is a `quasi-peak type' meter whose ballistics respond with approximately the same dynamics as the human ear.
- 18. CLIP: Indicator illuminates when output signal reaches +26dBu (approx. 0VU on OUTPUT METER). This is equivalent to approximately 4dB below the digital clipping level of 30.5dBu.
- 19. PHASE: Reverses the phase of TAMPA's output. The INVERT position forces TAMPA's analog audio output to be 180 degrees out of phase from the input, where the NORM position leaves the analog output in phase with the input. NOTE: Digital output is always in phase with the input.
- 20. 20dB PAD: When engaged, attenuates TAMPA's analog output by 20dB useful in avoiding the overload of subsequent equipment in the sound chain. The 20dB pad will also allow you increase the gain on the TAMPA preamp and force the signal into an area of greater soft-clipping/tube emulation. The 20dB PAD appears in the TAMPA circuit after the OUTPUT LEVEL METER. NOTE: Digital output level is not affected by the 20dB pad.
- 21. SAMPLE RATE: Adjusts the sample rate of TAMPA's digital outputs to match the sampling rate of the digital gear TAMPA is feeding. Settings are 44.1kHz, 48kHz, 88.2kHz and 96kHz.



Rear Panel Features

- S/PDIF OUTPUT: Outputs a mono 24-bit S/PDIF signal on both left and right channels at the sample rate specified by the SAMPLE RATE selector. This female coaxial RCA jack accepts a digital coaxial cable with a male RCA plug, and connects to external gear that will receive a S/PDIF digital signal.
- 2. AES/EBU OUTPUT: Outputs a mono 24-bit AES/EBU signal on both left and right channels at the sample rate specified by the SAMPLE RATE selector. This male XLR jack accepts a digital coaxial cable with a female XLR plug, and connects to external gear that will receive an AES/EBU digital signal.
- 3. BALANCED/UNBALANCED 1/4" TRS OUTPUT: Outputs a balanced analog line-level signal when using a 1/4" TRS plug, or an unbalanced analog line-level signal when using a 1/4" TS plug.
- 4. BALANCED XLR OUTPUT: Outputs a balanced analog line-level signal on a male XLR jack, and accepts a standard audio cable with a female XLR plug. Pin 2 is positive. (You should verify that other equipment you are connecting is also wired with pin 2 positive.)
- 5. 12VAC: Power connector for TAMPA's external power supply. (WARNING: Do not use any power supply other than the model that shipped with your TAMPA, as damage to your equipment may result.)

Setup and Connection

Connecting TAMPA to your equipment is simple.

AC power

To route AC power to TAMPA, connect the external power supply that comes with TAMPA between the 12VAC jack on the rear panel and AC power.

WARNING: Do not use any other power supply than the model that shipped with your TAMPA, as damage to your equipment may result.

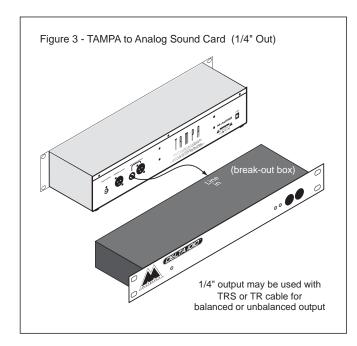
Connecting Your Tampa's Outputs

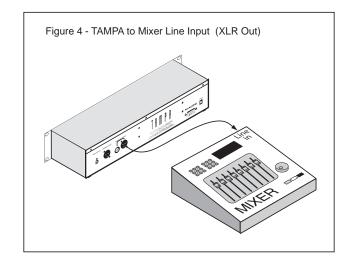
The TAMPA is a microphone and instrument preamplifier, outputting a linelevel analog and/or digital signal. It may be connected to a variety of devices, such as the line input to a computer sound card and other types of recording equipment, the line inputs of a mixing console, or the digital inputs of a sound card or D/A converter.

NOTE: The balanced configuration will yield 6dB more level than the unbalanced configuration.

To output to analog equipment:

Connect either the 1/4" or XLR OUTPUT on TAMPA's rear panel to your mixing console, recorder or other line-level device. Using an XLR or 1/4" TRS connector will result in a balanced output, while a 1/4" TS connector will yield an unbalanced output. (Balanced cables help insure a cleaner signal—use balanced cabling when possible.)

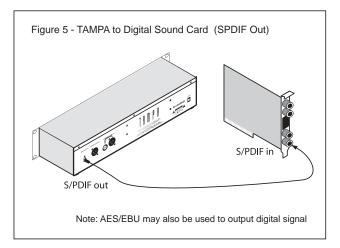




To output to digital equipment:

- Connect either the S/PDIF OUTPUT or AES/EBU OUTPUT to your sound card, digital recorder or other digital device using an analogous connector and a good quality digital cable.
- Use the SAMPLE RATE knob to select the sample rate matching that of the destination device. Set the destination device to receive it's sampling clock source from an "external device."

CAUTION: While connected to digital equipment, disconnect any unbalanced analog output connectors in order to insure optimal digital performance.



Power-Up Procedure

Normal power-up procedure would be to turn on the TAMPA first, and then the rest of the gear in the signal chain, with power amps or powered speakers being last.

- 1. Turn off or turn down the volume on your monitors and/or the other gear that receives a signal from TAMPA.
- 2. Turn the GAIN control on TAMPA all the way down.
- 3. Set the POWER switch to the "POWER" position. The VU meters will illuminate to indicate that power is on.
- 4. Turn on or turn up each successive piece of gear that your TAMPA is connected to in the signal chain.

Note: It is highly recommended to turn down the volume on your monitors and/or other gear that receives a signal from TAMPA before turning TAMPA on or off or making connections.

Connecting To Your Tampa's Inputs

Instrument Input:

- 1. Connect the instrument to TAMPA's MICROPHONE/INSTRUMENT INPUT using either a 1/4" TRS balanced or TS unbalanced cable.
- 2. Switch the INST/MIC switch to the INST position.

Microphone Input:

- 1. With the GAIN knob on the TAMPA turned fully counterclockwise, connect the microphone to TAMPA's MICROPHONE/INSTRUMENT INPUT using a cable with a standard XLR male connector.
- Switch the INST/MIC switch to the MIC position. If your microphone requires phantom power, flip the +48V switch to the +48V position.
- 3. Use the GAIN knob to apply the microphone's output signal to the TAMPA input.
- 4. While testing the microphone, experiment with different INPUT IMPEDANCE settings to find the best combination of signal level and tonality for a given microphone. Experimentation is required because there is no standard impedance across mics, or even standard methodology of load balancing. Vintage mics and many modern tube mics typically work best when loaded with a matching impedance, so set the INPUT IMPEDANCE selector as closely as possible to the impedance spec of the mic. On the other hand, start with the 2400 setting for modern solid-state condenser mics because most are intended for connection to higher impedance loads (even though they might have low impedance specs). Again, we recommend experimentation because the only rule of thumb is to use the setting that produces the best sound.

TAMPA Controls

Setting Levels

TAMPA has the ability to provide a massive 66dB of gain. Due to TAMPA's Temporal Harmonic Alignment technology, higher overall levels (also called "soft clipping") bring increased levels of harmonics that commonly translate to the ear as greater warmth. Still, the signal level at the line input of the device receiving the TAMPA's output signal will ultimately be the determining factor in where you set TAMPA's gain controls.

Since setting levels on the TAMPA may include the use of the Compressor section as well as the OUTPUT PAD switch, please refer to the sections, "Setting the Compressor" and "Using the Output Pad" for more information.

To set the signal level:

- 1. Make certain that the +20dB switch is set to the OFF position.
- 2. If you are using analog outputs, make certain that the 20dB PAD is set to the OUT position.
- 3. While supplying a representative signal to the input source, slowly rotate the GAIN control clockwise until the OUTPUT meter begins to register a change in level. If you have rotated the GAIN control completely clockwise and are still not showing a level on the OUTPUT meter, then reset the GAIN control to the minimum position, engage the +20dB switch and slowly rotate the GAIN control clockwise until the OUTPUT METER registers.

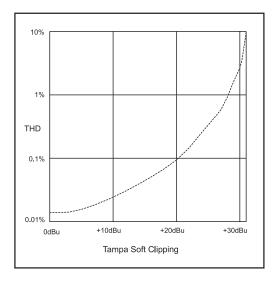
NOTE: At this time, you may want to begin to examine the signal level showing up at the receiving device that the TAMPA is connected to. It is not unusual for the TAMPA to register a relatively low level on its output meter, while the receiving device is showing sufficient level for recording or other purposes.

- 4. Experiment with GAIN control while continuing to provide a representative source signal. Technically, you want to find a high GAIN meter reading without triggering the CLIP indicator. Since the threshold for the CLIP indicator is 4dB below digital clip, however, you may still have plenty of headroom available. Here again, you must use your ears to find the setting that sounds best.
- 5. If possible, adjust the input stage of the mixer, recording gear or other devices that are connected to TAMPA's output in order to get an optimal signal. (Possible external device adjustments include operating level, trims, faders and pads.) If TAMPA's GAIN adjustment is the only level adjustment in your signal chain, then adjust it according to the desired level on the device receiving the TAMPA's signal.

NOTE: If you find that TAMPA's digital output is lower than desirable when compression is engaged, try summing the identical left and right digital outputs together. You'll get 6dB more overall level and 3dB greater signal-to-noise ratio.

About Soft Clipping and the 20dB Pad Switch:

Soft clipping (often referred to as tube saturation in tube gear) is often desirable to add the perception of warmth to a recording. TAMPA exhibits a gradual soft clipping characteristic, where distortion increases with signal level. This distortion exhibits a non-linear curve as shown.



Soft clipping is tied to the internal signal level —a function of input level and gain. The OUTPUT LEVEL METER shows the internal signal level and is therefore a good indicator of soft clipping. In general, the more the OUTPUT LEVEL METER moves, the more soft clipping is present. The 20dB PAD reduces the output level without changing the internal level. Engaging the 20dB PAD switch (thereby attenuating the analog output signal) allows you to drive the internal signal level higher, without overloading outboard gear and producing a warmer sound (for a more neutral sound, leave the 20dB PAD turned off.)

By engaging the 20dB PAD switch, you are allowed to increase the preamp GAIN knob setting, thereby bringing out the TAMPA's "soft-clipping" characteristic. The higher the gain from the preamp, the more that soft-clipping will occur (up until the point of actual clipping). Increasing the amount of soft-clipping will give you a sound similar to what is known as "tube saturation," which is what occurs when increased signal levels are used in a tube-type preamp. This feature is unique to the TAMPA preamp and gives you emulation of tube warmth across the full frequency spectrum, at your discretion and complete control.

Feel free to experiment with this feature. It may be something that you choose to use with one instrument or mic and not another. It's up to you and your particular taste and needs.

NOTE: The 20dB PAD only affects the analog output circuitry. Engaging the pad will have no affect on the signal at the digital outputs—in the digital domain, the only way to avoid soft clipping is by running at lower signal levels.

The Input Impedance Selector

On some microphones, such as vintage or tube mics, you will want to match the TAMPA's input impedance to the output impedance of the microphone. On others, such as modern solid-state FET mics, the input impedance can be set to 10x the microphone's output impedance or more. TAMPA's Input Impedance selector is designed to optimize performance with different microphones.

For vintage (older tube or ribbon mics) or modern tube mics, check the output impedance listed in the microphone's documentation, then set the INPUT IMPEDANCE selector to the closest setting. If in doubt, try the 300 Ohm or 600 Ohm setting.

For a FET mic (solid-state), start with the 2400 Ohm setting. For any mic, some experimentation might be in order. You may achieve varied results from alternate impedance settings, and the effect that you hear in tonal quality may be a desirable one.

Using the Phase Invert Switch

When a single microphone is in use, phase will rarely be a consideration and the PHASE switch should remain in the NORMAL position. When multiple microphones are in use, the positioning and acoustic relationship of the mics and the room can cause phase problems resulting in loss of level and tonality. This often manifests as an atypical "thin" or "hollow" sound. In this event, try switching the phase of one of the microphone preamps.

To change the phase of TAMPA's output by 180 degrees, set the PHASE switch to the INVERT position. If the sound does not improve significantly, return the PHASE switch to the NORMAL position and look elsewhere for the cause.

Using the Low-Cut Filter

Unwanted low frequencies can sometimes be a problem when recording with a microphone. Moderate soundproofing, for example, tends to absorb

high frequencies more than the low frequencies produced by passing traffic or overhead jets. Low frequencies can also be prominently produced when someone bumps a mic stand or taps their feet. TAMPA has a built-in low cut filter that rolls off frequencies of 80Hz and below at 12dB/octave. While this can be instrumental in preventing unwanted rumble and other low frequencies from being recorded or amplified, it should be used with caution since some instruments and voices produce frequencies that fall below 80Hz.

To engage TAMPA's low-cut filter, set the LOW CUT switch to the LOW CUT position.

NOTE: Some microphones have their own low cut switches. Be certain to use this feature on either the mic or the preamp, not both.

Setting the Compressor

While the philosophy behind compressors is pretty straightforward, the process of finding the actual settings that work best varies from situation to situation and from ear to ear. A little compression can make the ideal difference in the dynamics of a track, where too much compression can suck the life out of a performance.

In general, the ideal is to record the hottest level possible without distorting or clipping, as this results in the greatest signal level in relation to the noise floor on your recording media. Many sound sources, such as the human voice, can vary significantly in level during the course of a performance. Even when the situation is not that severe, it is often desirable to lessen or "compress" the difference between the extremes in dynamics. That's where compressors come in—automatic dynamic range reduction.

The threshold setting determines the point in the compressor's output level above which the compressor will engage. The compression ratio is expressed as the relationship of the signal level passing the threshold to that of the output level. For example, at a 2:1 ratio, for every 2dB of signal level over the threshold, the output is 1dB of signal level over the threshold. At a 4:1 ratio, for every 4dB of signal level over the threshold, the output is 1dB of signal level over the threshold, the output is 1dB of signal level over the threshold, the output is 1dB of signal level over the threshold. The higher the compression ratio, the more uniform the signal level is once the threshold is reached. In general, a lower compression ratio (4:1 and under) is fairly transparent. At 6:1 and over, compression may tend to become an audible effect. This may not be the desired result for a vocal performance, but may work well for a lead guitar track.

The attack time determines how long it takes for compression to engage

after the signal passes the threshold setting. In general, ideal attack time settings are a function of the type of instrument and inherent transients. For instruments like string and bass that exhibit slower attack, a slower attack time setting is usually best. Similarly, instruments such as snare drums exhibiting fast transients typically benefit from faster attack times.

The release time controls how long it takes the signal to return from a state of gain reduction to a normal state of zero gain reduction. Longer release times tend to produce a smoother, more transparent compressor action, especially with low-frequency content such as bass guitar. Exact settings will be determining partially by the genre and tempo of the source signal, as well and how the instrument is played.

To set TAMPA's compressor:

- 1. Start with the COMPRESSOR IN/OUT switch set to the OUT position.
- 2. Use the steps outlined under "Setting Levels" to achieve a good sound and output level.
- 3. Set the COMPRESSOR IN/OUT switch to the IN position, wih all compressor controls set fully counterclockwise. The COMPRESSOR IN INDICATOR will light to show that the compressor is engaged.
- 4. Start by determining the approximate compression ratio for the desired result. Adjust the RATIO and the THRESHOLD to achieve the desired amount of gain reduction. TAMPA's GAIN REDUCTION VU meter is useful in confirming what your ears are hearing by dynamically displaying the amount of gain reduction. For transparent compression, try to have loud passages incur a maximum gain reduction of about -3dB to -6db, while insuring that softer passages incur no reduction.
- 5. Set the ATTACK and DECAY times to taste. 5ms and 1 second are good respective starting points.
- 6. Continue to adjust all controls until you achieve the desired result. This may include the adjustment of the preamp gain controls, including the GAIN knob, +20dB gain boost, and the 20dB PAD.

As with many things in the audio realm, experimentation is required due to the differences between instruments, performance styles, microphones, recording environments and production styles. Remember to test dynamic extremes in the source material when setting the compressor. Keep in mind that the compressor is also responding to the signal level it gets from TAMPA's input gain stage.

The next page lists some typical settings for compressor use and is a good place to start in your experimentation.

Typical Settings

Following are some starting points for different types of compression applications. As with many things in the audio realm, experimentation is required due to the differences between instruments, performers, style, microphones, recording environments and production styles. Remember to test dynamic extremes in the source material when setting the compressor. Also keep in mind that the compressor is also responding to the signal level it gets from TAMPA's input gain stage.

Typical Vocals (Transparent)

Threshold: Set to realize approx. 3dB of gain reduction on loudest passages Ratio: 2:1 to 6:1 (depending on how dynamic the vocalist is) Attack: Fast Release: Medium

Acoustic Guitar (Transparent)

Threshold: Set to realize approx. 3dB of gain reduction on loudest passages Ratio: 2:1 to 4:1 Attack: Medium Release: Medium (longer for guitars that are boomier)

Acoustic Guitar (Maximum Presence)

Threshold: Set to realize extreme gain reduction Ratio: 10:1 Attack: Fast Release: Slow

Electric Guitar (Compressed Effect)

Threshold: Set to realize extreme gain reduction Ratio: 10:1 Attack: Fast Release: Very slow

Electric Bass (Transparent)

Threshold: Set to realize 1 to 2dB of gain reduction on loudest passages Ratio: 2:1 Attack: Medium Release: Slow

Electric Guitar and Bass (Sustaining)

Threshold: Set to realize -10dB or greater of consistent gain reduction Ratio: 10:1 Attack: Medium Release: Very long

Snare (Fat)

Threshold: Set to realize -6dB gain reduction consistently Ratio: 6:1 Attack: Fast Release: Medium

Kick Drum (Slap)

Threshold: Set to realize –6dB gain reduction consistently Ratio: 6:1 Attack: Medium fast Release: Medium fast

TAMPA Specifications

Preamp Specs

- Mic input: XLR with variable impedance loading (2400/1200/600/300 ohms)
- Instrument input (TRS): 200K balanced / 100K unbalanced
- Digital outputs: AES/EBU and S/PDIF 24-bit mono (44.1/48/88.2/96kHz)
- Continuously variable gain: 34dB
- Low-cut switch: -12dB / octave below 80Hz
- System gain (balanced in/out): 12dB to 46dB (20dB gain switch off; 32dB to 66dB (20dB gain switch on)
- Maximum analog output at soft clip: +30dBu (balanced); +24dBu (unbalanced)
- Output impedance: 600 ohms
- Digital clip level: +30.5dBu
- · Discrete Class A circuitry throughout the audio path
- Frequency response: 20Hz to 40KHz (+/- 0.25dB)
- Distortion: Increases with level until soft-clip occurs (0.5% max at 10 VAC balanced out)
- Signal-to-noise: 110dB; "A" weighted (gain set to minimum)
- EIA noise rating: -127dBm; 600 ohms (gain set to maximum)
- VU meter: Registers 0 VU at +26dBu
- Clip indicator: Lights at 4dBu below digital clip

Analog Compressor Specs

- Compression type: Dual passive optical attenuator; servo controlled, peak responding
- · Gain reduction: 20dB minimum
- Threshold: Continuously adjustable from -20dBu to +20dBu
- Compression ratio: Continuously adjustable from 1.1/1 to 10/1
- Attack time: Continuously adjustable from 1ms to 11ms (scale is in time constants)
- Release time: Continuously adjustable from 250ms to 5 seconds (scale is in time constants)
- Headroom: 30dB (20dB gain switch on); 24dB (20dB gain switch off)
- VU meter: Registers 0 VU at zero gain reduction



Technical Support & Contact Information

For additonal help, contact M-Audio Technical Support by telephone (626-445-7556, 9-5 PST M-F), by fax (626-445-8407) or by e-mail (support@m-audio.com).

If you have any questions, comments or suggestions about this product, or any M-Audio product, we invite you to contact us directly by using the following information:

M-AUDIO U.S.

45 E. Saint Joseph St. Arcadia, CA 91006-2861 U.S.A. Sales Information: Sales Information (email): Tech Support: Tech Support (email): Fax:

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Your TAMPA's Warranty

M-AUDIO warrants this product, under normal use, to be free of defects in materials and workmanship for a period of One (1) Year from date of purchase, so long as: the product is owned by the original purchaser, with proof of purchase from an authorized M-AUDIO dealer and, the product has been registered to the original purchaser, the purchaser having returned to M-AUDIO the completed product warranty card. This warranty explicitly excludes power supplies and included cables which may become defective as a result of normal wear and tear.

In the event that M-AUDIO receives, from an original purchaser and within the warranty coverage period, written notice of defects in materials or workmanship, M-AUDIO will either replace the product, repair the product, or refund the purchase price at its option. In the event repair is required, shipment to and from M-AUDIO and possible nominal handling charges shall be born by the purchaser. In the event that repair is required, a Return Authorization number must be obtained from M-AUDIO. After this number is obtained, the unit should be shipped back to M-AUDIO in a protective package with a description of the problem and the Return Authorization clearly written on the package.

In the event that M-AUDIO determines that the product requires repair because of user misuse or regular wear, it will assess a fair repair or replacement fee. The customer will have the option to pay this fee and have the unit repaired and returned, or not pay this fee and have the unit returned un-repaired.

The remedy for breach of this limited warranty shall not include any other damages. M-AUDIO will not be liable for consequential, special, indirect, or similar damages or claims including loss of profit or any other commercial damage, even if its agents have been advised of the possibility of such damages, and in no event will M-AUDIO's liability for any damages to the purchaser or any other person exceed the price paid for the product, regardless of any form of the claim. M-AUDIO specifically disclaims all other warranties, expressed or implied. Specifically, M-AUDIO makes no warranty that the product is fit for any particular purpose.

This warranty shall be construed, interpreted, and governed by the laws of the state of California. If any provision of this warranty is found void, invalid or unenforceable, it will not affect the validity of the balance of the warranty, which shall remain valid and enforceable according to its terms. In the event any remedy hereunder is determined to have failed of its essential purpose, all limitations of liability and exclusion of damages set forth herein shall remain in full force and effect. Notes: